

**Notice of Allowability**

Application No.

10/648,533

Examiner

Paul Huber

Applicant(s)

EDWARDS, JATHAN D.

Art Unit

2653

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment and terminal disclaimer filed December 9, 2004.
2. ☒ The allowed claim(s) is/are 1, 2 & 4-20 (renumbered as claims 1, 2, 4, 5, 3 & 6-19, respectively).
3. ☒ The drawings filed on 25 August 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

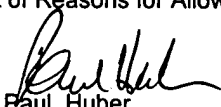
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
Paul Huber  
Primary Examiner  
Art Unit: 2653

Art Unit: 2653

**EXAMINER'S AMENDMENT & REASONS FOR ALLOWANCE**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In the specification, page 1, between the title and the first paragraph, the following was inserted:

-- This application is a continuation of U.S. Patent Application Serial No. 09/813,065, now U.S. Patent No. 6,625,100. --

The following is an examiner's statement of reasons for allowance: the prior art of record considered as a whole fails to teach or suggest a holographic data storage medium comprising: a first substrate portion; a second substrate portion; a holographic recording material sandwiched between the first and second substrate portions; and an optical detectable tracking pattern formed on a surface of at least one of the substrate portions, further wherein:

1) **the optically detectable tracking pattern comprises a pattern formed on the surface of at least one of the substrate portions to define a periodic cycle of grating period; or**

2) **the optically detectable tracking pattern comprises a grating pattern formed on the surface of at least one of the substrate portions to define stepped changes in grating period; or**

3) **the optically detectable tracking pattern is defined by at least two grating patterns formed on the surface of at least one of the substrate portions to define a beat frequency.**

The prior art of record further fails to teach or suggest a holographic data storage system comprising: a holographic medium comprising a first substrate portion, a second substrate portion, a holographic recording material sandwiched between the first and second substrate portions, and an optical detectable tracking pattern formed on a surface of at least one of the substrate portions, **a reference beam to reconstruct a hologram stored in the holographic recording material, and a probe beam to diffract off the optically detectable tracking pattern.**


The prior art of record further fails to teach or suggest a method of determining a location on a holographic medium including a substrate and a holographic recording material comprising: interrogating the holographic medium with a probe beam, **wherein the holographic recording material of the holographic medium is insensitive to the probe beam; and detecting diffracted light associated with**

Art Unit: 2653

**the probe beam, the diffracted light be diffracted by a substrate of the medium to indicate a position on the medium.** Bold language emphasized.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Huber whose telephone number is 703-308-1549.



Paul Huber  
Primary Examiner  
Art Unit 2653

pwh  
March 4, 2005